

Kernza® Identity Preserved Program Guidelines

Revised 2019

1. PURPOSE

The Kernza® Identity Preserved Program (the "Program") is under the direction of The Land Institute. All Kernza® trademark licensees must adhere to these guidelines as referenced in the agreement signed with The Land Institute. The license agreement and the Identity Preserved Program work in conjunction with one another and both are required to be adhered to by growers and handlers of grain that can be sold as Kernza®. The primary purpose of these programs is to provide requirements for the production and handling of intermediate wheatgrass (*Thinopyrum intermedium*) grain that can be sold under the Kernza® brand. Growers producing grain in compliance with these Guidelines (the "Guidelines") will be eligible to sell Kernza® branded grain. The Land Institute also allows its Kernza® trademark to be used by any producer of products made from Kernza® branded grain, provided they become a registered Kernza® retailer or manufacturer, purchase raw material from a registered Kernza® grower who adhered to the Program and Guidelines in the production of Kernza® grain, and comply with The Land Institute's Trademark Usage Guidelines.

2. SCOPE

These Guidelines establish requirements pertaining to the production of Kernza® grain. Currently, Kernza® seed may NOT be held back by growers for additional plantings without the express written permission of The Land Institute. The Identity Preserve Program applies to the phase of production from the planting of parent seed supplied by the Land Institute or another approved seed source as specified in Section 5.2 through to supplying conditioned whole grain to food manufacturers.

2.1 Subcontractors: All subcontractors to licensees must comply with these guidelines. It is the responsibility of the licensee to ensure the proper submission of documentation and maintenance of records.

3. RESPONSIBILITIES

3.1 Kernza® licensee shall:

- 3.1.1 Enter into a Trademark License Agreement with The Land Institute in order to be entitled to produce and market Kernza® branded grain.
- 3.1.2 Meet federal and state requirements regarding sales of agricultural products.
- 3.1.3 Attend specified training sessions as required to participate in this Program.
- 3.1.4 Enroll grain production and acres in the Program.
- 3.1.5 Submit information required for participation in the Program via The Land Institute's online platform (thelandinstitute.submittable.com).
- 3.1.6 Complete Grower's Application prior to first year's planting via The Land Institute's online platform (thelandinstitute.submittable.com).
- 3.1.7 Provide completed Identity Preserve surveys each year prior to harvest via The Land Institute's online platform (thelandinstitute.submittable.com).
- 3.1.8 Provide completed Identity Preserve surveys regarding grain quality by 31 December of each year via The Land Institute's online platform (thelandinstitute.submittable.com).
- 3.1.9 Provide photo documentation for remote field inspection annually prior to harvest via The Land Institute's online platform.
- 3.1.10 Conform to all Program requirements, including these Guidelines.
- 3.1.11 Ensure that all required inspections are completed prior to harvest.
- 3.1.12 Ensure that Program operating procedures and requirements are followed by contract growers, conditioners and other parties performing tasks related to Kernza® production.
- 3.1.13 Use the Kernza® brand properly to identify only product that has been determined to have met Program requirements and in compliance with the Trademark Usage Guidelines.
- 3.1.14 Permit access for inspection by the Land Institute or its agent to production sites(s), subcontractor sites, storage sites, processing facilities and records by appointment.
- 3.1.15 Submit samples of grain to Northern Plains Grain Inspection or other approved laboratory for toxin, moisture, and purity testing as specified in Section 11 of the Identity Preserve Program.

3.2 The Land Institute (or its agent) shall (subject to payment by grower of any applicable fees):

Kernza® Identity Preserved Program Guidelines

Revised 2019

- 3.2.1 Evaluate each application submitted to:
 - 3.2.1.1 Ensure Program participation requirements have been met.
 - 3.2.1.2 Ensure all required information has been provided.
 - 3.2.1.3 Identify obviously non-conforming applications prior to inspection.
- 3.2.2 Approve Grower's Application prior to first year's planting
- 3.2.3 Provide Trademark licensing agreements to approved growers
- 3.2.4 Provide Identity Preserve surveys each year prior to harvest for agronomic surveys and prior to 31 December for grain quality surveys via The Land Institute's online platform (thelandinstitute.submittable.com)
- 3.2.5 Evaluate photo documentation for remote field inspection annually prior to harvest via The Land Institute's online platform and communicate regarding any obvious issues
- 3.2.6 Respond to questions regarding the Identity Preserve Program within 60 days of submission.
- 3.2.7 Report field inspection results to producers.
- 3.2.8 Determine product conformity to standards based on submitted results
- 3.2.9 Monitor use of the KERNZA® mark and branding elements for conformity.
- 3.2.10 Monitor the Program to validate the effectiveness of the system in achieving the Program objectives.
- 3.2.11 Maintain a list of approved seed strains (varieties, populations, sources, or seed lots) in Section 5.2
- 3.2.12 Maintain a list of approved seed suppliers at Kernza.com beginning December 2019.
- 3.2.13 Maintain a list of approved seed conditioning facilities at Kernza.com beginning December 2019.
- 3.2.14 Maintain a list of registered Kernza® retailers and manufacturers.
- 3.2.15 Facilitate interaction between growers and buyers of Kernza® Grain
- 3.2.16 Provide access to most recent research results
- 3.2.17 Make efforts to build strength in the Kernza® brand
- 3.2.18 Help develop markets for Kernza® seed and grain

4. APPLICATION FOR PRODUCTION

- 4.1 Producer shall apply to The Land Institute (or its agent) on the Grower Participation Form supplied by The Land Institute at thelandinstitute.submittable.com to become a registered Kernza® Grower
- 4.2 Producer shall submit application including all required documentation by the 31st of December in the year of seeding.
- 4.3 Applications shall include:
 - 4.3.1 Map describing field location
 - 4.3.2 Identity and source of seed used/quantity to be planted
 - 4.3.3 Field number – unique to each field
 - 4.3.4 Planted area
 - 4.3.5 Producer's agreement to:
 - 4.3.5.1 Adhere to program requirements.
 - 4.3.5.2 Permit access to The Land Institute (or its agent) for performing required inspections and examining required records.
- 4.4 Late applications, made after the 31st of December in the year of seeding, may result in denial for certification. A late application fee will be assessed.

5. FIELD STANDARDS

- 5.1 Land requirements – producer shall prepare field by destroying all weedy growth and vegetation from a previous crop.
- 5.2 Seed requirements
 - 5.2.1 Seed shall be from a genetic strain approved by The Land Institute.
 - 5.2.2 Kernza® producer shall obtain seed from a seed source approved by The Land Institute.

Kernza® Identity Preserved Program Guidelines

Revised 2019

- 5.2.3 Written permission for use of a Kernza® seed source other than provided directly by The Land Institute or another approved source (list maintained at Kernza.com beginning 31 December 2019) must be given by The Land Institute.
- 5.2.4 Concurrent with requests being made for exemption to 5.2.2, documentation must be provided in accordance with Section 10. Documentation does not guarantee exemption.
- 5.3 Planting equipment shall be cleaned thoroughly prior to seeding enrolled field.
- 5.4 Kernza® production fields shall:
 - 5.4.1 Be separated from adjacent fields by a minimum of 5 feet.
 - 5.4.2 Not contain undesirable species in excess of amounts allowed in Section 10.4
- 5.5 When The Land Institute withdraws approval from a previously approved seed source, harvests will be permitted from fields planted from these seed sources for up to three years following the date of withdrawal of approval.

6. FIELD INSPECTION

- 6.1 Fields may be inspected by The Land Institute (or its agent) either in person by appointment or via submitted photograph
 - 6.1.1 In person field inspections may include data collection for research purposes

7. HARVESTING, STORAGE AND HANDLING REQUIREMENTS

- 7.1 Producers and handlers of Kernza® seed, grain or other products are responsible for thoroughly cleaning all equipment used for harvesting, conveying, storing, handling, and conditioning before handling.
- 7.2 Stored product must be identified at all times.
 - 7.2.1 A bin or lot number must identify all bins.
 - 7.2.2 The contents of bins must be identified with an attached bin label and associated bin record.
 - 7.2.3 Containers must be labeled with a stenciled lot number or a tag securely fastened to the bag.
 - 7.2.4 Lot or bin numbers should include identifiers for the farm

8. CONDITIONING REQUIREMENTS

- 8.1 Conditioning facilities shall be approved by The Land Institute (or its agent) prior to handling Kernza® seed, grain or other product via their online platform (thelandinstitute.submittable.com)
- 8.2 Facility must preserve the identity of the product at all times.
- 8.3 Approval of conditioning facilities shall be on an annual basis via renewed trademark license agreement with the organization owning the facility.
- 8.4 Facilities handling Kernza® destined for sale as a food product shall submit evidence of inspection for food safety standard compliance.

9. SAMPLING

- 9.1 Grower shall draw and retain a sample from each field harvested as the product is conveyed into the storage bin.
- 9.2 A representative sample of each conditioned lot shall be drawn by an authorized sampler according to designated sampling procedures
- 9.3 The sample shall be submitted to a designated laboratory for testing along with information necessary to complete certification.
 - 9.3.1 Designated laboratories include Northern Plains Grain Inspection
 - 9.3.2 Written approval of other laboratories may be given by The Land Institute at its discretion.
- 9.4 The Land Institute shall determine the tests to be performed.
 - 9.4.1 Current tests on Kernza® destined to be food to be performed include: Purity, DON, moisture and protein.
- 9.5 Product shall be tested and analyzed in accordance with the procedures prescribed by The Land Institute

Kernza® Identity Preserved Program Guidelines

Revised 2019

- 9.6 Test results shall be submitted to The Land Institute (or its agent) via its online platform and evaluated for conformance to quality standards.
- 9.7 The Land Institute (or its agent) shall determine the certification status of all lots for which Program certification has been requested within 60 days of submission of required data.

10. SEED STANDARDS

- 10.1 The Land Institute shall designate sources approved to be used for seed.
- 10.2 Lots to be used for seed must comply with all applicable seed law requirements.
- 10.3 Seed should be produced in accordance with specific standards to ensure quality grain production:
 - 10.3.1 Isolation
 - 10.3.1.1 Seed production fields shall be separated from other intermediate wheatgrass by a minimum distance of 165 feet.
 - 10.3.1.2 Seed production fields shall be separated from inseparable other crops by a distance adequate to prevent mechanical mixture.
 - 10.3.2 Seed Quality Standards
 - 10.3.2.1 Pure seed (minimum) – 90%
 - 10.3.2.2 Total Weed Seeds (maximum) – .5%
 - 10.3.2.3 Restricted Weed Seeds (maximum) - 90/lb.
 - 10.3.2.4 Other Crop Seeds (maximum) – .5%
 - 10.3.2.5 Inert matter (maximum) – 10%
 - 10.3.2.6 Germination (minimum) – 80%
- 10.4 Seed may NOT be held back for additional plantings without the express written permission of The Land Institute.

11. GRAIN QUALITY STANDARDS

- 11.1 Some varieties are expected to be genetically free-threshing, producing naked seed. Others are expected to largely remain in-hull. Non-free-threshing types will require dehulling for most purposes, but may be desirable for direct use in malting. Different quality standards may be established for “in-hull” and “naked” grains.
- 11.2 Kernza® seed and/or grain shall not exceed 13% moisture.
- 11.3 Kernza® grain shall not exceed 2ppm DON
- 11.4 The following special grades shall be prohibited:
 - 11.4.1 *Ergoty Kernza®*. Kernza® seed and/or grain that contains more than 0.1 percent of ergot.
 - 11.4.2 *Garlicky Kernza®*. Kernza® seed and/or grain that contains in a 1,000 gram portion more than two green garlic bulblets or an equivalent quantity of dry or partly dry bulblets.
 - 11.4.3 *Light Kernza®*. Kernza® seed and/or grain that has an unmistakable odor of smut, or which contains, in a 250-gram portion, smut balls, portions of smut balls, or spores of smut in excess of a quantity equal to 5 smut balls, but not in excess of a quantity equal to 30 smut balls of average size.
 - 11.4.4 *Smutty Kernza®*. Kernza® seed and/or grain that contains, in a 250-gram portion, smut balls, portions of smut balls, or spores of smut in excess of a quantity equal to 30 smut balls of average size.
 - 11.4.5 *Treated Kernza®*. Kernza® seed and/or grain that has been scoured, limed, washed, sulfured, or treated in such a manner that the true quality is not reflected by either the numerical grades or the U.S. Sample grade designation alone.

12. RECORD REQUIREMENTS

- 12.1 Producer shall retain records for three years following final sale from an enrolled field.
- 12.2 Records of all operations relating to the program shall be complete and adequate to account for all incoming product and final disposition of product and shared with The Land Institute via its online platform (thelandinstitute.submittable.com)

Kernza® Identity Preserved Program Guidelines

Revised 2019

- 12.3 Producer shall submit all records requested by The Land Institute through its online platform, including management practices, locations of acreages, harvest and post harvest techniques, and buyer contact information.
- 12.4 Handlers shall submit to The Land Institute (or its agent) of all records pertaining to the Kernza® product or ensure that their contracted producers do so.
- 12.5 Required records:
 - 12.5.1 Maps describing field locations.
 - 12.5.2 Invoice and tags from seed planted.
 - 12.5.3 Planting records.
 - 12.5.4 Management practices and requirements
 - 12.5.5 Harvest records including dates, amounts and any destroyed product.
 - 12.5.6 Storage records including assigned bin numbers
 - 12.5.7 Grain quality information
 - 12.5.8 Purchaser information
 - 12.5.9 Records of product movement
 - 12.5.10 Sales records (pounds sold).
 - 12.5.11 Current inventory of eligible product.
 - 12.5.12 Quality Assurance program records – (applications, inspection reports, etc.)

13. MARK OF CONFORMITY

- 13.1 Product meeting Program requirements may be labeled as Kernza® brand grain.
- 13.2 Proof of conformity shall accompany all sales and transfers of eligible product and shall be provided to all buyers at the time of delivery.
- 13.3 Product shipped without proof of conformity shall not have met Program requirements and will be deemed to be non-conformant.

14. SANCTIONS FOR MISCONDUCT

- 14.1 It is the responsibility of each Program participant to abide by the rules, adhere to the standards and report irregularities or violations.
- 14.2 Intentional violation of program requirements and/or misuse of marks of conformity may result in suspension from program participation.
- 14.3 Decisions to suspend participation in the program due to misconduct shall be made by The Land Institute.
- 14.4 Appeals or petitions for reinstatement shall be directed to The Land Institute.

15. FEES

- 15.1 Producers shall be responsible for all Kernza® IP Program participation fees
- 15.2 The Land Institute shall determine royalty fees to be assessed on sales of Kernza® branded seed and grain products in accordance with Trademark Licensing agreements.